American Journal of Physiology: Endocrinology and Metabolism

No. 1. JANUARY 1989

Effect of physical activity on calcium and phosphorus metabolism in the rat J. K. Yeh, J. F. Aloia, and S. Yasumura	E31
Pyrogenic and thermogenic effects of interleukin 1β in the rat	E1
M. J. Dascombe, N. J. Rothwell, B. O. Sagay, and M. J. Stock	E7
Adipose tissue and skeletal muscle blood flow during mental stress B. Linde, P. Hjemdahl, U. Freyschuss, and A. Juhlin-Dannfelt	E12
Interleukin 1 is a potent stimulator of islet insulin secretion and phosphoinositide hydrolysis $W.S.Zawalich$ and $K.C.Zawalich$	E19
Basis for myocardial mechanical defects associated with non-insulin-dependent diabetes S. W. Schaffer, M. S. Mozaffari, M. Artman, and G. L. Wilson	E25
Altered hepatic fatty acid metabolism in endotoxicosis: effect of L-carnitine on survival N. Takeyama, D. Takagi, N. Matsuo, Y. Kitazawa, and T. Tanaka	E31
Effects of hypercortisolemia and diabetes on skeletal muscle insulin receptor function in vitro and in vivo	
N. E. Block and M. G. Buse	E39
Induction of hepatic glycogenesis in the fetal rat P. A. Gruppuso and D. L. Brautigan	E49
Absorption of epidermal growth factor and insulin in rabbit renal proximal tubules S. Nielsen, E. Nexø, and E. I. Christensen	E55
Effects of thyroid status on atrial natriuretic peptide release from isolated rat atria N. L. M. Wong, D. Huang, N. S. Guo, E. F. C. Wong, and D. C. K. Hu	E64
Effect of CCK-8 on pentose phosphate shunt activity, pyridine nucleotides, and glucokinase of rat islets	
E. J. Verspohl, I. Breuning, and H. P. T. Ammon	E68
Effect of thyroid status on catecholamine stimulation of thyroxine 5'-deiodinase in brown adipocytes I. Mills, A. Raasmaja, N. Moolten, G. Lemack, J. E. Silva, and P. R. Larsen	E74
Effects of lectins and tunicamycin on cAMP response to parathyroid hormone R. Rizzoli and JP. Bonjour	E80
Ca ²⁺ concentration influences the hepatic extraction of bioactive human PTH hormone-(1-34) in rats	
P. D'Amour and PM. Huet	E87
Regulation of Na-dependent P_i transport by parathyroid hormone in osteoblast-like cells $T.$ Selz, $J.$ Caverzasio, and $JP.$ Bonjour	E93
Glucoregulatory function of thyroid hormones: role of pancreatic hormones M. J. Müller, A. G. Burger, E. Ferrannini, E. Jequier, and K. J. Acheson	E101
CRF is involved in the pyrogenic and thermogenic effects of interleukin 1β in the rat $N.J.$ Rothwell	E111
Effects of obesity and ovarian steroids on insulin secretion and removal in sheep J. P. McCann, E. N. Bergman, and T. J. Reimers	E116
Bioenergetic changes during contraction and recovery in diabetic rat skeletal muscle R. A. J. Challiss, M. Vranic, and G. K. Radda	E129
Effect of exercise on insulin receptor binding and kinase activity in skeletal muscle J. L. Treadway, D. E. James, E. Burcel, and N. B. Ruderman	E138
Isolated pituitary cells: glucocorticoids do not rapidly suppress ACTH secretion in response to CRF	
M. Familari and J. W. Funder	E145
Ion microprobe analysis of mouse calvariae in vitro: evidence for a "bone membrane" D. A. Bushinsky, J. M. Chabala, and R. Levi-Setti	E152
Fasting and postabsorptive hepatic glucose and insulin metabolism in hyperthyroidism N. Raboudi, R. Arem, R. H. Jones, Z. Chap, J. Pena, J. Chou, and J. B. Field	E159

Whole body and regional fuel metabolism during early postexercise recovery J. T. Devlin, J. Barlow, and E. S. Horton	E167
α -Glycerophosphate shuttle in a clonal β -cell line M. D. Meglasson, K. M. Smith, D. Nelson, and M. Erecinska	E173
Discrepancy between glucose transport and transporters in human femoral adipocytes E. Karnieli, R. Moscona, R. Rafaeloff, Y. G. Illouz, and M. Armoni	E179
Regulation of branched-chain 2-oxo acid dehydrogenase activity during exercise $G.\ J.\ Kasperek$	E186
RAPID COMMUNICATIONS	
Galanin release during pancreatic nerve stimulation is sufficient to influence islet function B. E. Dunning and G. J. Taborsky, Jr.	E191
RUARY 1989	
Physiological attributes of endogenous bioactive luteinizing hormone secretory bursts in man J. D. Veldhuis, M. L. Johnson, and M. L. Dufau	E199
Insulin degradation products from perfused rat kidney	13100
W. C. Duckworth, F. G. Hamel, J. Liepnieks, D. Peavy, B. Frank, and R. Rabkin	E208
Myometrial α_1 -adrenoceptors in pregnant guinea pig: their distribution and increased number	E215
S. J. Arkinstall and C. T. Jones Effect of epoxyeicosatrienoic acids on growth hormone release from somatotrophs	
G. D. Snyder, P. Yadagiri, and J. R. Falck Exercise and insulin stimulate skeletal muscle glucose transport	E221
through different mechanisms E. Sternlicht, R. J. Barnard, and G. K. Grimditch	E227
Hypothalamic noradrenergic and sympathoadrenal control of glycemia after stress G. A. Smythe, W. S. Pascoe, and L. H. Storlien	E231
Hypothalamic monoamines associated with the cephalic phase insulin response L. J. Holmes, L. H. Storlien, and G. A. Smythe	E236
Chronic exercise compensates for insulin resistance induced by a high-fat diet in rats E. W. Kraegen, L. H. Storlien, A. B. Jenkins, and D. E. James	E242
Microdialysis of intercellular adenosine concentration in subcutaneous tissue in humans P. Lönnroth, PA. Jansson, B. B. Fredholm, and U. Smith	E250
Evidence for functional thromboxane A_2 -prostaglandin H_2 receptors in human placenta A . Hedberg, P . F . Mento, E . C . K . Liu, A . M . Hollander, and B . M . Wilkes	E256
In vitro correction of impaired Na ⁺ -K ⁺ -ATPase in diabetic nerve by protein kinase C agonists	
S. A. Lattimer, A. A. F. Sima, and D. A. Greene	E264
Attenuation of the osmotic release of vasopressin by enkephalins in dogs K. Matsui, T. Kimura, K. Ota, M. Shoji, M. Inoue, K. Iitake, and K. Yoshinaga	E270
Phlorizin-induced normoglycemia partially restores glucoregulation in diabetic dogs G. Hetenyi, Jr., C. Gauthier, M. Byers, and M. Vranic	E277
DOPA, norepinephrine, and dopamine in rat tissues: no effect of sympathectomy on muscle DOPA	Foo
E. Eldrup, E. A. Richter, and N. J. Christensen Leucine metabolism in aging humans: effect of insulin and substrate availability N. K. Fukagawa, K. L. Minaker, V. R. Young, D. E. Matthews, D. M. Bier, and J. W. Rowe	E284
Insulin sensitivity and responsiveness during lactation and dry period in goats E. Debras, J. Grizard, E. Aina, S. Tesseraud, C. Champredon, and M. Arnal	E29
Proinsulin mRNA levels in fasting and fed ADX rats: evidence for an indirect effect of glucocorticoids	19290
F. T. Fiedorek, Jr., and M. A. Permutt Effect of hypercalcemia-producing tumor on 1,25(OH) ₂ D ₃ biosynthesis in athymic mice	E303
S. C. Kubroig P. A. Voeb C. Nalbantian Prandt D. H. Showin and M. J. Fayer	ESO

No. 2. FEB

Palmitate oxidation by isolated working fetal and newborn pig hearts J. C. Werner, R. E. Sicard, and H. G. Schuler Central effects of β-endorphins on glucose homeostasis in the conscious dog P. M. Radosevich, D. B. Lacy, L. L. Brown, P. E. Williams, and N. N. Abumrad	E315
RAPID COMMUNICATIONS	
Calcitonin gene-related peptide receptor antagonist human CGRP-(8-37) T. Chiba, A. Yamaguchi, T. Yamatani, A. Nakamura, T. Morishita, T. Inui, M. Fukase, T. Noda, and T. Fujita	E331
LETTERS TO THE EDITOR	
On the measurement of lactate turnover in humans J. Katz; M. D. Jensen and J. D. Miles	E336
Retraction P. E. Cryer	E338
CH 1989	
Effects of low-sodium diet on regulation of platelet α_2 -adrenergic receptors in young and elderly humans	
M. A. Supiano, R. R. Neubig, O. A. Linares, J. B. Halter, and S. G. Rosen Oxygen consumption after massive sympathetic nervous system discharge	E339
S. A. Lang, M. B. Maron, and S. A. Signs	E34
Effect of physical training on the insulin resistance of aging R. P. Tonino	E35
Energy expenditure during carbohydrate overfeeding in obese and nonobese adolescents L. G. Bandini, D. A. Schoeller, J. Edwards, V. R. Young, S. H. Oh, and W. H. Dietz	E35
Acute effects of phorbol esters on receptor-mediated IP_3 , cAMP, and progesterone levels in rat granulosa cells	Foo
J. S. Davis, L. L. Weakland, R. G. Coffey, and L. A. West Cytosolic free calcium in normal somatotropes: effects of forskolin and phorbol ester R. W. Holl, M. O. Thorner, and D. A. Leong	E36
Alterations of fasting glucose and fat metabolism in intrauterine growth-retarded newborn dogs	135
R. M. Kliegman	E38
AMP and IMP dephosphorylation by soluble high- and low- K_m 5'-nucleotidases J. Spychala, V. Madrid-Marina, P. J. Nowak, and I. H. Fox	E3
Hepatic sexual dimorphism: ontogeny and influence of adult gonadectomy R. K. Studer and L. Ganas	E3
Reciprocal changes of muscle oxidases and liver enzymes with recovery from iron deficiency J. L. Azevedo, Jr., W. T. Willis, L. P. Turcotte, A. S. Rovner,	
P. R. Dallman, and G. A. Brooks	E4
Developmental changes in adrenergic regulation of fetal arginine vasopressin secretion M. G. Ervin, J. F. Padbury, M. G. Ross, R. D. Leake, and D. A. Fisher	E4
Oxidative fuel metabolism during mild hypoglycemia: critical role of free fatty acids S. Caprio, R. A. Gelfand, W. V. Tamborlane, and R. S. Sherwin	E4
Kinetics of zinc metabolism in the rat: effect of dibutyryl cAMP M. A. Dunn and R. J. Cousins	E4
Response of gut glucagon-like immunoreactivity to hypoglycemia in dogs A. Ohneda, I. Sasaki, H. Naito, M. Toda, M. Ohneda, and F. Koizumi	E4

No. 3. M.

Direct effect of CNS on insulin hypersecretion in obese Zucker rats: involvement of vagus nerve
H. Choi Lee, D. L. Curry, and J. S. Stern

LETTERS TO THE EDITOR

	LETTERS TO THE EDITOR	
	Effect of sepsis on activity of pyruvate dehydrogenase complex in skeletal muscle and liver T. C. Vary and J. H. Siegel	E445
	ANNOUNCEMENTS	E446
No. 4. A	APRIL 1989	
	Absorption of plasma proteins from peritoneal cavity of normal rats E. Regoeczi, O. Zaimi, P. A. Chindemi, and P. A. Charlwood	E447
	Influence of verapamil on some subcellular defects in diabetic cardiomyopathy N. Afzal, G. N. Pierce, V. Elimban, R. E. Beamish, and N. S. Dhalla	E453
	Food intake, body and heart composition, and heart rate in T ₃ plus atenolol-treated rats U. Bürgi, M. E. Bürgi-Saville, F. Ziegler, L. Krähenbühl, G. Huber, and C. Schoch	E459
	Influence of age, fat cell weight, and obesity on O ₂ consumption of human adipose tissue P. Hallgren, L. Sjöström, H. Hedlund, L. Lundell, and L. Olbe	E467
	Potassium-induced aldosterone biosynthesis in cultured rat zona glomerulosa cells J. Müller, M. Lauber, and C. Schmid	E475
	1,25-Dihydroxyvitamin D_3 restores fertility of vitamin D-deficient female rats $G.\ G.\ Kwiecinski,\ G.\ I.\ Petrie,\ and\ H.\ F.\ Deluca$	E483
	Characterization of calcium channels of a glucose-responsive rat insulinoma M. Hoenig, L. L. Russo, and D. C. Ferguson	E488
	Prolonged increase in insulin-stimulated glucose transport in muscle after exercise G. D. Cartee, D. A. Young, M. D. Sleeper, J. Zierath, H. Wallberg-Henriksson, and J. O. Holloszy	E494
	Exercise-induced fall in insulin and hepatic carbohydrate metabolism during muscular work D. H. Wasserman, P. E. Williams, D. B. Lacy, R. E. Goldstein, and A. D. Cherrington	E500
	Interpulse interval of GnRH stimulation independently modulates LH secretion L. St. L. O'Dea, J. S. Finkelstein, D. A. Schoenfeld, J. P. Butler, and W. F. Crowley, Jr.	E510
	Anti-calmodulin agents affect osmotic and angiotensin II-induced vasopressin release N. F. Rossi and R. W. Schrier	E516
	Alternative method for minimal model analysis of intravenous glucose tolerance data K. M. Weber, I. K. Martin, J. D. Best, F. P. Alford, and R. C. Boston	E524
	Local and systemic estradiol-17\(\beta\): effects on uterine and systemic vasodilation R. R. Magness and C. R. Rosenfeld	E536
	Nuclear thyroid hormone receptors: ontogeny and thyroid hormone effects in sheep D. Polk, D. Cheromcha, A. Reviczky, and D. A. Fisher	E543
	Transport of glutamine across blood-facing membranes of perfused rat jejunum P. M. Taylor, C. J. Egan, and M. J. Rennie	E550
	Impaired very low-density lipoprotein-triglyceride catabolism in acute and chronic fructose-fed rats T. Hirano, J. C. L. Mamo, M. E. Poapst, A. Kuksis, and G. Steiner	E559
	RAPID COMMUNICATIONS	
No E	Vasopressin: a regulator of adrenal glucocorticoid production? V. L. Brooks and L. J. Blakemore MAY 1989	E566
110. 3.	The state of the s	

Impact of body fat mass and percent fat on metabolic rate and thermogenesis in men	
K. R. Segal, I. Lacayanga, A. Dunaif, B. Gutin, and F. X. Pi-Sunyer	E573
Changes in glucose transporters in muscle in response to exercise	
T. Fushiki, J. A. Wells, E. B. Tapscott, and G. L. Dohm	E580

	Effects of training and detraining on dose-response relationship between glucose and insulin secretion	7.00
	K. J. Mikines, B. Sonne, B. Tronier, and H. Galbo	E588
	Calcium stimulates the release of calcitonin gene-related peptide from the canine thyroid B. Ahrén, R. Ekman, and P. Laurberg	E597
	Human tissue adrenergic receptors are not predictive of responses to epinephrine in vivo S. B. Liggett, S. D. Shah, and P. E. Cryer	E600
	Dietary hormonal modification of growth, intestinal ATPase, and glucose transport in tilapia	
	S. J. Reshkin, M. L. Grover, R. D. Howerton, E. G. Grau, and G. A. Ahearn	E610
	Effect of galanin on glucose-, arginine-, or potassium-stimulated insulin release T. Yoshimura, J. Ishizuka, G. H. Greeley, Jr., and J. C. Thompson	E619
	Postreceptor defect in insulin action in streptozotocin-induced diabetic rats H. Nishimura, H. Kuzuya, M. Okamoto, K. Yamada, A. Kosaki, T. Kakehi, G. Inoue, S. Kono, and H. Imura	E624
	Rapid measurement of whole body and forearm protein turnover	
	using a $[^2H_5]$ phenylalanine model G. N. Thompson, P. J. Pacy, H. Merritt, G. C. Ford, M. A. Read, K. N. Cheng, and D. Halliday	E631
	Low oxygen selectively inhibits aldosterone secretion from bovine adrenocortical	
	cells in vitro H. Raff, D. L. Ball, and T. L. Goodfriend	E640
	Refeeding and insulin increase lipoprotein lipase activity in rat brown adipose tissue	12040
	C. M. H. Carneheim and S. E. H. Alexson	E645
	Insulin, glucagon, and catecholamines in prevention of hypoglycemia during fasting P. J. Boyle, S. D. Shah, and P. E. Cryer	E651
	Polymyxin B inhibits stimulation of glucose transport in muscle by hypoxia or contractions F. I. Harribson, M. D. Slagger, J. P. Ziggeth, and J. O. Hollows.	E662
	E. J. Henriksen, M. D. Sleeper, J. R. Zierath, and J. O. Holloszy Testing of the assumptions made in estimating the extent of futile cycling A. Wajngot, V. Chandramouli, W. C. Schumann, K. Kumaran,	
	S. Efendić, and B. R. Landau Hepatic glucose production and insulin sensitivity preceding diabetes in monkeys	E668
	N. L. Bodkin, B. L. Metzger, and B. C. Hansen	E676
	Role of antiglucocorticoid RU 486 on dexamethasone-induced hypertension in rats $M.\ Kalimi$	E682
	Vitamin D kinetics in vivo: effect of 1,25-dihydroxyvitamin D administration B. P. Halloran and M. E. Castro	E686
	Medium-chain fatty acids increase glucose production in normal and low birth weight newborns	
	P. E. Bougnères, L. Castaño, F. Rocchicioli, H. Pham Gia, B. Leluyer, and P. Ferré	E692
No. 6. JI	JNE 1989	
	Fetal glucose utilization in response to maternal starvation and acute hyperketonemia A. Leturque, S. Hauguel, JP. Revelli, AF. Burnol, J. Kandé, and J. Girard	E699
	Effects of glucose and insulin on fetal glucose oxidation and oxygen consumption W. W. Hay, Jr., J. E. DiGiacomo, H. K. Meznarich, K. Hirst, and G. Zerbe	E704
	Changes of sympathetic nerve activity induced by 2-deoxy-D-glucose infusion in humans J. Fagius and C. Berne	E714
	Structure-kinetic relationships of choriogonadotropin and related molecules L. Liu, J. L. Southers, J. W. Cassels, Jr., S. M. Banks, R. E. Wehmann, D. L. Blithe, H. C. Chen, and R. C. Nivels.	P701
	D. L. Blithe, HC. Chen, and B. C. Nisula Reversal of the toxic effects of cachectin by concurrent insulin administration	E721
	D. L. Fraker, M. J. Merino, and J. A. Norton	E725
	Insulin inhibition of overnight glucose production and gluconeogenesis from lactate in NIDDM H. Vhi, Jaminon, F. Helpe, T. Sano, N. Nuriban, and M. R. Tachinan	E732
	H. Yki-Järvinen, E. Helve, T. Sane, N. Nurjhan, and MR. Taskinen	1102

ANNOUNCEMENTS	E872
Adrenergic control of renin during dietary sodium deprivation in conscious dogs H. Hisa, YH. Chen, K. J. Radke, J. L. Izzo, Jr., C. D. Sladek, and M. L. Blair	E863
Effect of continuous feeding on maternal protein metabolism and fetal growth in the response P. R. Ling, B. R. Bistrian, G. L. Blackburn, and N. Istfan	E852
Contributions of gluconeogenesis and glycogenolysis during glucose counterregulation in normal humans L. Lecavalier, G. Bolli, P. Cryer, and J. Gerich	E844
Demonstration of a role for growth hormone in glucose counterregulation P. De Feo, G. Perriello, E. Torlone, M. M. Ventura, F. Santeusanio, P. Brunetti J. E. Gerich, and G. B. Bolli	E835
Body fat from body density: underwater weighing vs. dual-photon absorptiometry J. Wang, S. B. Heymsfield, M. Aulet, J. C. Thornton, and R. N. Pierson, Jr.	E829
Lipoprotein lipase in myocytes and capillary endothelium of heart: immunocytochemical study E. J. Blanchette-Mackie, H. Masuno, N. K. Dwyer, T. Olivecrona, and R. O. Sco	w E818
Disposition of a glucose load in fed rats and rats adapted to a high-carbohydrate diet $\it C.~B.~Niewoehner~and~F.~Q.~Nuttall$	E811
Generalized decrease in brain glucose metabolism during fasting in humans studied by PET C. Redies, L. J. Hoffer, C. Beil, E. B. Marliss, A. C. Evans, F. Lariviere, S. Marrett, E. Meyer, M. Diksic, A. Gjedde, and A. M. Hakim	E805
Modification of glycosylation of renin in sodium-depleted and captopril-treated rats S. Kim, M. Hosoi, M. Hiruma, F. Ikemoto, and K. Yamamoto	E798
Glucose uptake and flux through phosphofructokinase in wounded rat skeletal muscle J. Forster, A. S. Morris, J. D. Shearer, B. Mastrofrancesco, K. C. Inman, R. G. Lawler, W. Bowen, and M. D. Caldwell	E788
Pubescence-related changes in hepatocyte insulin dynamics in female rats G. R. Krakower and A. H. Kissebah	E780
Brown adipose tissue of mice with GTG-induced obesity: altered circadian control J. Eley and J. Himms-Hagen	E773
Characteristics of secondary hyperparathyroidism in vitamin D-deficient dogs G. N. Hendy, M. A. Stotland, D. Grunbaum, L. J. Fraher, N. Loveridge, and D. Goltzman	E765
Calcium dependence of osmolality-, potassium-, and angiotensin II-induced aldosterone secretion K. J. Radke, R. E. Clendenin III, R. E. Taylor, Jr., and E. G. Schneider	E760
Increase in ovarian leukotrienes during hormonally induced ovulation in the rat L. L. Espey, N. Tanaka, and H. Okamura	E753
Impairment of glucose disposal by infusion of triglycerides in humans: role of glycemia C. P. Felley, E. M. Felley, G. D. van Melle, P. Frascarolo, E. Jéquier, and JP. Felber	E747
R. H. Eckel and T. J. Yost	E740

